

shg Feb-1

# Work Order ID 64509

Tuesday, December 07, 2010 9:07:47 AM



Item ID: D350-615-041  
 Revisi ID:  
 Item Name: Ground Handling Wheel Modification  
 Start Date: 12/7/2010 Start Qty: 150.00  
 Required Date: 1/21/2011 Req'd Qty: 150.00  
 Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals: Process Plan: PL Date: 10-2-7 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D350-615-041	B								
100		0.00							
DC									
Document Control	Memo	0.00							
	Photocopy bluefile and type labels with Eurocopter part# (2 GHW Kits per box) as per PPP D350-615-041 CHG003								
110		0.00							
Small Fab	Memo	0.00							
Small Fab	Assemble D2282-041 with D2282-043 as per Dwg D350-615 ***Only engage one thread on three 5/16-18-015C bolts***								
120		0.00							
QC									
Quality Control	Memo	0.00							
	QC5- Inspect part completeness to step on W/O								

*[Signature]* 11-01-07  
 75

*[Signature]* 01/27 150

*[Signature]*  
 150

8/16/09

8/16/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Tuesday, December 07, 2010 9:07:47 AM

Page 2

Item ID: D350-615-041

Accept

Revision ID:

Item Name: Ground Handling Wheel Modification

Start Date: 12/7/2010 Start Qty: 150.00

Required Date: 1/21/2011 Req'd Qty: 150.00

Reference:

Cust Item ID:

Customer:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130 QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

140

0.00



Packaging

Memo

0.00

Packaging

Identify with Eurocopter and Dart part# using permanent ink stamp and pack for shipping as per PPP D350-615-041

Location: 31A

PPP Rev: C

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

5/10/2010

475

Boxes

11/2/13 (1500)

11/02/02

PL11-02-1 (150)

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**NOTE:** Date & initial all entries





Tuesday, December 07, 2010 9:07:52 AM

[illegible]

\_\_\_\_\_

**Required Qty: 150.00**

**Comments:** IPP Rev:K Removed Manufacturing 05-12-05 JLM IPP Rev:L  
revise bom DD #10.03.18 verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2282-041 		Manufactured	No			110	Each	0.0000	1	150			
T Assembly													
D2282-043 		Manufactured	No			110	Each	4.0000	1	150			
Saddle Assembly													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST261		4							
				57515		1							
				60197		3							
5/16-18-015C 		Purchased	No			110	Each	567.0000	3	450			
SS Bolt 5/16-18 1.5" L													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST377		567							
				107762		1							
				111550		5							
				112560		38							
				- 115072 -		25							
				115954		500							
D3015-3 		Manufactured	No			110	Each	47.0000	3	450			
Locknut													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST033		47							
				43758		21							
				60287		26							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, December 07, 2010 9:07:52 AM

Page 2

Work Order ID: 64509

Parent Item: D350-615-041

Parent Item Name: Ground Handling Wheel Modification

Start Date: 12/7/2010

Required Date: 1/21/2011

Start Qty: 150.00

Required Qty: 150.00

\*

5/16WC

Purchased

No

110

Each

1,247.000

12

1800



SS Flat Washer 5/16 FW516S1

## Location

## Loc Qty

## Loc Code

ST377

1247

112560

176

114758

77

115072

14

115110

293

115174

32

-115791-

-161-

-115824-

294

-115931-

-50-

-116054-

-100-

116306

50

7/16-14-050C

Purchased

No

110

Each

170.0000

1

150



SS Bolt 7/16 5" Long (92198A672)

## Location

## Loc Qty

## Loc Code

ST379

120

111903

1

115133

100

115163

19

ST389

50

115703

50

D3015-5

Manufactured

No

110

Each

660.0000

1

150



SS Nylock Nut 7/16

## Location

## Loc Qty

## Loc Code

ST033

660

51709

9

52744

651

EP 11/01/27  
M116473 (700x)

M116474 (50x)

M116385 (100x)  
178  
200 294

M116643 (278)  
50  
100  
50

EP 11/01/27  
M116552 (75x)

M116377 (50x)

25

EP 11/01/27

6  
144

Tuesday, December 07, 2010 9:07:52 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Page 3

Work Order ID: 64509

Parent Item: D350-615-041

Parent Item Name: Ground Handling Wheel Modification

Start Date: 12/1/2010

Required Date: 1/21/2011

Start Qty: 150.00

Required Qty: 150.00

7/16WC

Purchased

No

110

Each

1,061.000

2

300



SS Flat Washer 7/16



*Handwritten signature*

Location

Loc Qty

Loc Code

ST379

1061

112563

61

115129

1000

41  
259

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

DART

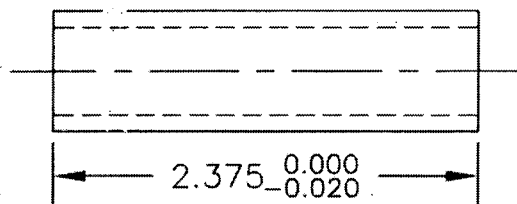
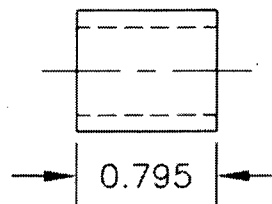
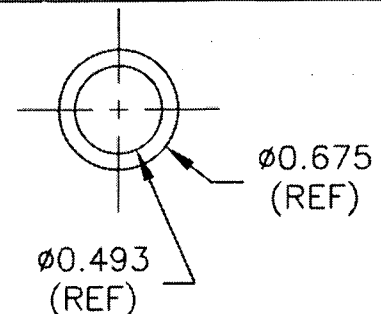
WORK ORDER

NO. 44509

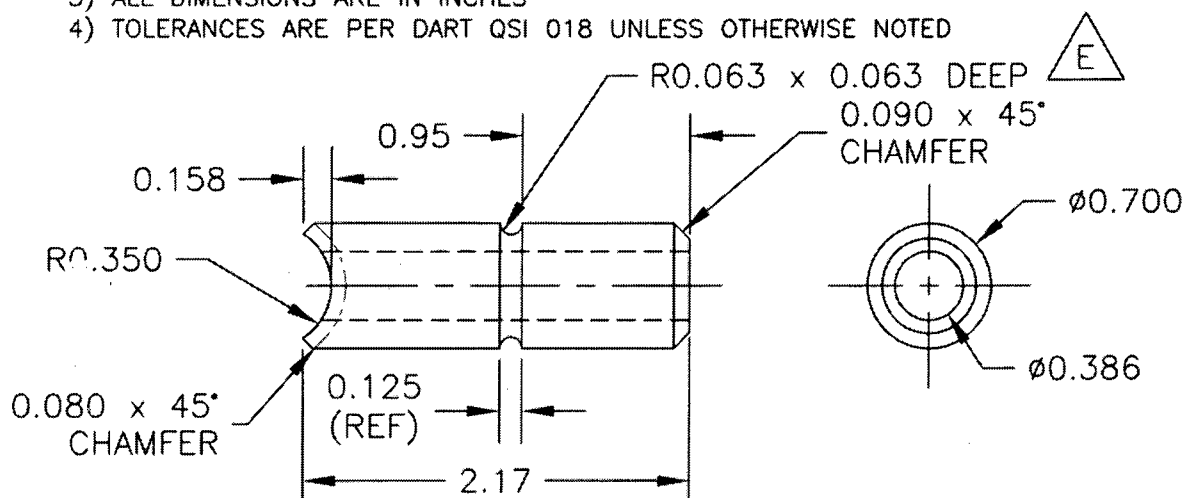
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2282	REV. E SHEET 1 OF 2
DATE 05.06.07	TITLE HANDLE TUBES SCALE 1:1		
A	94.10.14	NEW ISSUE	
B	95.03.23	RE-DESIGN	
C	97.10.20	CORRECTED NUMBERING SCHEME	
D	05.03.16	REDESIGN D2282-5; 0.795 WAS 0.750	
E	05.06.07	D2282-5 304 SS WAS 303 SS; R0.063 x 0.063 WAS R0.080 x 0.030	

RELEASED

05/09/16

**D2282-3****D2282-7****D2282-3/-7 TUBE:**

- 1) MATERIAL: T304/T316 3/8 SCHEDULE 40 (REF. DART SPEC. M304TR0.675W.091)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**D2282-5****D2282-5 STEM:**

- 1) MATERIAL: AISI 304 STAINLESS STEEL (REF. DART SPEC. M304R0.750)
- 2) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

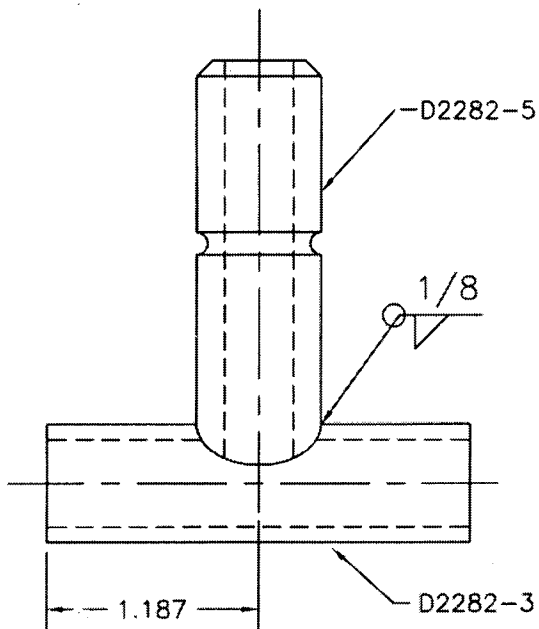
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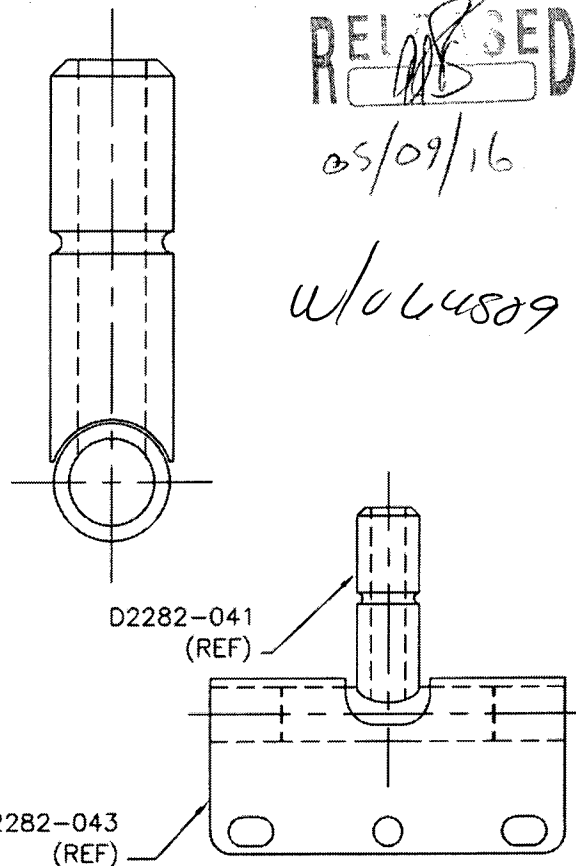
**NOTE:** Date & initial all entries



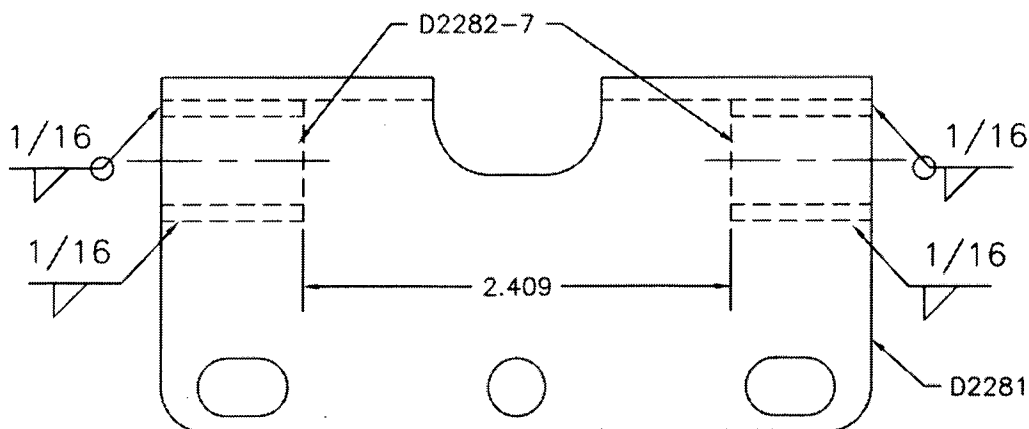
DESIGN BW	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>up</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2282	REV. E SHEET 2 OF 2
DATE 05.06.07	TITLE HANDLE TUBES		SCALE 1:1



**D2282-041 'T' ASSEMBLY**  
WELD ASSEMBLY PER DART QSI 004



**GENERAL ASSEMBLY**  
SCALE 1:2



**D2282-043 SADDLE ASSEMBLY**  
WELD ASSEMBLY PER DART QSI 004

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



DESIGN <b>BW</b>	DRAWN BY <b>KE</b>	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	
CHECKED <b>DW</b>	APPROVED <b>BW</b>	DRAWING NO. D350-615	REV. 8 SHEET 1 OF 2
DATE 97.10.21		TITLE GROUND HANDLING WHEEL MOD.	SCALE NTS
A	95.03.23	NEW ISSUE	
B	97.10.21	CHANGE NUMBERING SCHEME	

\* 64509

-041	Part No.	Description
X	D350-615-041	Ground Handling Wheel Mod.
1	D2282-041	"T" ASSEMBLY
1	D2282-043	SADDLE ASSEMBLY
3	5/16-18-015C	5/16 BOLT 1.5 LONG
3	5/16-18NC	5/16 LOCKNUT (D3015-3)
12	5/16WC	5/16 WASHER
1	7/16-14-050C	7/16 BOLT 5.0 LONG
1	7/16-14NC	7/16 LOCKNUT (D3015-5)
2	7/16WC	7/16 WASHER

THESE INSTRUCTIONS ARE TO BE USED IN CONJUNCTION WITH  
THE AIRCRAFT MAINTENANCE AND OVERHAUL INSTRUCTION MANUAL  
AC43.13.1A & 2A ACCEPTABLE METHODS, TECHNIQUES, AND PRACTICES

#### INSTALLATION:

1. Remove existing ground handling wheel pump saddle.
2. Replace saddle with D350-615-041.
3. Torque 5/16 bolts to bottom, then back-off half turn to allow easy rotation without excessive play.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**DART**

DESIGN BUD	DRAWN BY KE	DART AEROSPACE LTD VICTORIA INTERNATIONAL AIRPORT, CANADA	REV. B
CHECKED MAY	APPROVED BUD	DRAWING NO. D350-615	SHEET 2 OF 2
DATE 97.10.21	TITLE GROUND HANDLING WHEEL MOD.	SCALE NTS	

25  
32  
75  
100  
125

#64509

D2282-041 "T" ASSEMBLY

7/16-14-050C BOLT (1)  
7/16-14NC LOCK NUT (1)  
7/16WC WASHER (2)

5/16WC WASHER (REF)

5/16-18-015C BOLT (1)  
5/16-18NC LOCK NUT (1)  
5/16WC WASHER (4)  
(3 PLACES)

EXISTING PUMP BODY

D2282-043 SADDLE ASSEMBLY

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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